

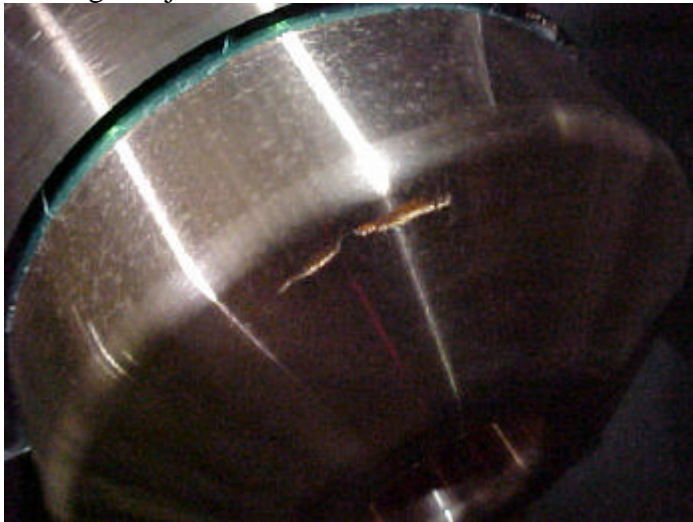
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DTL 1 commissioning continues to make good progress. As of yesterday we are allowed to increase the average current from 2 microampere to 60 microampere, which will allow to run long rf pulses with beam current.

On drift tube production several setbacks happened over the last weekend. On Saturday production of tank 2 drift tubes was stopped after final profiling on drift the first drift tube left a crater with a depth of approximately 0.015 inches. With the lead engineer flying out and after inspection a new procedure to profile drift tubes was put in place with in situ inspection while doing the machining in smaller steps. Wednesday (This) morning more drift tubes showed similar problems. Several steps are taken. Production is stopped and an investigation is ongoing. Weld samples were taken before and after DT welding that were flawless, while the drift tubes encounter problems. A recovery plan for tank 2 drift tubes is being developed. Since this work is done at ESCO and problems with the E beam welding QC have shown up before, it is considered to bring this job to Hanford.



This is the tank 2 drift tube with the crater on the front face.

The other drift for tanks 4-6, produced and Hanford meanwhile make good progress. So do the EMD and BPM special drift tubes and schedule holds. The schedule for these DT's is not different from last week **while the tank 2 schedule is not valid at this point.** The will be no weekly next week because of the Accelerator System Advisory Committee meeting.

Tank 4: Welding resumed at Hanford and last members of group D were welded and shipped to CMI for final profiling. Final profiling is complete on groups A, B and C and most of group D. First batch (30 units) of new drift tube bore plugs of a simpler, more robust design were completed and put into service; second batch (55 units) will be complete today. Group A, B, C and some of D will go to stem welding next week. Tank 5 cap welds were finished on group G units. Due to problems with tank 6 end cap fit up, welding will be done next on E and F's water channel weld repair and end cap welds. For tank 6 our original plan was to weld drift tubes after

the last tank-4 units were complete but this is on hold due to cap fit-up problem with the tank-6 drift tube end caps; 0.004" gap all way around is observed at the joint. We are now reviewing inspection reports and drawings to locate possible source of the interference causing the gap. Qualification of ESCO to do tank-6 end caps welds was underway, but work was stopped to inspect the unit (showing same gap as units at Hanford) by CMM. Inspection of the parts shows that a corner fillet radius being out of tolerance caused the fit-up problem. Radius will be fixed at Hanford and ESCO with end cap welding to follow. (3) Waveguide iris is at CMI for final machining

EMD and BPM DT's: EMD drift tubes 6-12, 5-13 and 6-18 were shipped to Albuquerque for final inspection. Welding of EMDs (Tanks 1, 2 and 3) at Sciaky was to be completed and welding of BPMs (Tanks 2 and 3) was started.

Component	Engineer	Tank 4					Tank 5				
		Identifier	Quantity	Shipping Date	Delivered	Change from last week	Identifier	Quantity	Shipping Date	Delivered	Change from last week
Drift Tubes	Gentzlinger	4A	7	24-Sep-03	0		5E	8	27-Oct-03	0	
		4B	6	25-Sep-03	0		5F	7	29-Oct-03	0	
		4C	6	29-Sep-03	0		5G	8	3-Nov-03	0	
		4D	8	15-Oct-03	0						
Dummies	Gentzlinger			With DT Groups					With DT Groups		
EMDs	O'Hara		4	29-Oct-03	0			4	13-Nov-03	0	
BPMs	O'Hara		2	29-Oct-03	0			2	29-Oct-03	0	
Top hats	Rowton	1.25"	27	24-Sep-03	0		1.25"	23	27-Oct-03	0	
Shrouds	Rowton		27	24-Sep-03	0			23	27-Oct-03	0	
Endwalls	Turon		2	Complete	2			2	Complete	2	
Post Coupler Kits	Rowton		27	Bead Pull + 15	0			23	Bead Pull + 15	0	
Slug Tuners	Rowton		12	Bead Pull + 7	0			12	Bead Pull + 7	0	
Access Ports			2		0			2		0	
RF Grills			4		0			4		0	
Wave Guide-Iris	Valdiviez		1	Complete	1	0		1	Complete	1	0
Window	Young		1	Complete	1	0		1	Complete	1	0
Stands	Turon		1	Complete	1			1	Complete	1	0

Milestones		Date	Date
Ready for RF		14-Nov-03	?
Ready for Beam		28-Feb-04	28-Feb-04
Tank Commissioning complete		1-May-04	1-May-04

Component	Engineer	Tank 6					Tank 2				
		Identifier	Quantity	Shipping Date	Delivered	Change from last week	Identifier	Quantity	Shipping Date	Delivered	Change from last week
Drift Tubes	Gentzlinger	6H	10	7-Nov-03	0		2J	12	9-Oct-03	0	
		6I	11	14-Nov-03	0		2K	12	16-Oct-03	0	
							2L	11	17-Oct-03	0	
							2M	8	20-Oct-03	0	
Dummies	Gentzlinger			With DT Groups					None	0	
EMDs	O'Hara		4	13-Nov-03	0			4	9-Oct-03	0	
BPMs	O'Hara		2	5-Nov-03	0			2	16-Oct-03	0	
Top hats	Rowton	1.25"	21	7-Nov-03	0		.75"	41	9-Oct-03	0	
Shrouds	Rowton		21	7-Nov-03	0		1.00"	6	9-Oct-03	0	
Endwalls	Turon		2	Complete	2			47	9-Oct-03	0	
Post Coupler Kits	Rowton		21	Bead Pull + 15	0			2	Complete	2	
Slug Tuners	Rowton		12	Bead Pull + 7	0			27	Bead Pull + 15	0	
Access Ports			2		0			12	Bead Pull + 7	0	
RF Grills			4		0			1		0	
Wave Guide-Iris	Valdiviez		1	25-Sep-03	0	0		4		0	
Window	Young		1	15-Oct-03	0			1	17-Sep-03	0	
Stands	Turon		1	Complete	1	0		1	15-Oct-03	1	
								1	Complete	1	

Milestones		Date	Date
Ready for RF		?	14-Nov-03
Ready for Beam		28-Feb-04	30-Jan-04
Tank Commissioning complete		1-May-04	1-May-04